

**A COMBINED PASSIVE AND ACTIVE
NEUROMONITORING METHOD AND DEVICE**

ABSTRACT OF THE DISCLOSURE

A method and system for combining active and passive

- 5 neuromonitoring methods to measure biopotential signals in sedated ICU patients over the entire range of sedation from fully alert to the suppression of EEG. The system utilizes an integrated sensor that includes a sound generator and a plurality of EEG electrodes on a single, lightweight disposable component. The method of the present invention utilizes a control unit for switching between active and
- 10 passive monitoring methods, depending upon the level of sedation. The control unit displays the results of active monitoring during levels of consciousness and light sedation and displays the results of passive monitoring during levels of deep sedation.